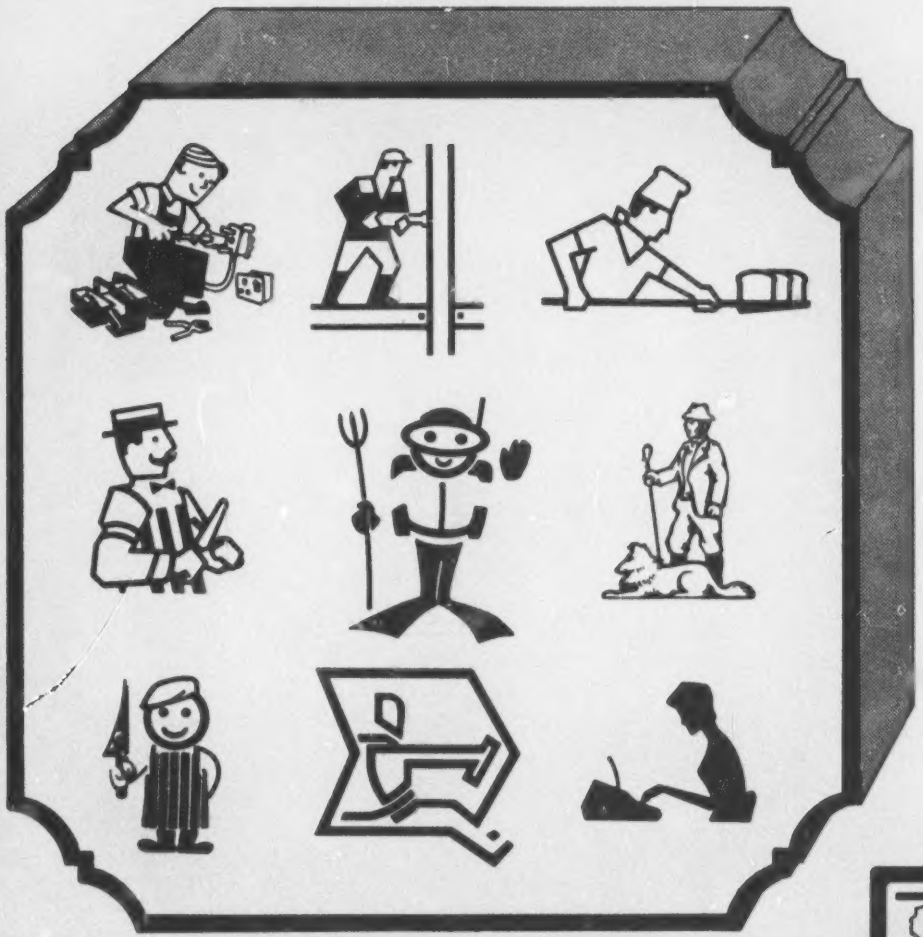
WISCONSIN EMPLOYMENT AND ECONOMIC INDICATORS



SEPTEMBER 1982

WISCONSIN DILHR
DEPARTMENT OF INDUSTRY, LABOR & HUMAN RELATIONS

WISCONSIN DATA AND SOURCES

	INDICATOR	SOURCE
L1	Average Work Week, Manufacturing	Wis. Dept. of Industry, Labor and Human Relations
L2	Average Overtime Hours, Mfg.	Wis. Dept. of Industry, Labor and Human Relations
L3	Average Weekly Initial Claims	Wis. Dept. of Industry, Labor and Human Relations
L4	Business Failures (Dollars)	Dun & Bradstreet, Inc.
L5	Business Failures (Number)	Dun & Bradstreet, Inc.
L6	New Business Incorporations	Wisconsin Secretary of State
L7	Net Gain in Business Phone Access Lines	Wis. Telephone Co. and General Telephone Co.
L8	Building Plans Examined	Wis. Dept. of Industry, Labor and Human Relations
C1	Help-Wanted Advertising Index (Milw.)	National Industrial Conference Board
C2	Total Unemployment Rate	Wis. Dept. of Industry, Labor and Human Relations
C3	Natural Gas Sales	Wisconsin Public Service Commission
C4	New Car Registrations	Wis. Department of Transportation
C5	Electric Power Sales	Wisconsin Public Service Commission
C6	Total Securities Registrations	Wisconsin Commissioner of Securities
C7	Personal Income	"Business Week," McGraw Hill
C8	Average Weekly Earnings, Mfg.	Wis. Dept. of Industry, Labor and Human Relations
C9	Cash Receipts From Farm Marketing	U.S. Department of Agriculture
C10	Contract Construction Employment	Wis. Dept. of Industry, Labor and Human Relations
X1	Birth Registrations	Wis. Department of Health and Social Services
X2	Death Registrations	Wis. Department of Health and Social Services
X3	Natural Net Gain in Population	Wis. Department of Health and Social Services
X4	Marriage Registrations	Wis. Department of Health and Social Services
X5	Consumer Price Index (Milwaukee)	U.S. Bureau of Labor Statistics
X6	Index of Prices Received By Farmers	Wisconsin Department of Agriculture
X7	Net Gain in Residential Phone Access Lines	Wis. Telephone Co. and General Telephone Co.
X8	Total Job Openings Received	Wis. Dept. of Industry, Labor and Human Relations
X9	Manufacturing Employment	Wis. Dept. of Industry, Labor and Human Relations

NOTES: Selected series are seasonally adjusted by the Bureau of the Census X-11 Variant of the Census Method II Seasonal Adjustment Program. The adjusted data are plotted on arithmetic scales.

SECTION A is a summary of recent data and current changes for all indicators and is presented in chart form. The indicators are presented with cyclical timing as the principle basis of classification.

SECTION B is a summary of Wisconsin Labor Force Estimates, including Employment, Unemployment and Unemployment Rates, and selected U.S. data.

SECTION C analyzes the Wisconsin labor force by industry and by specified Standard Metropolitan Statistical Areas.

SECTION D singles out certain economic time series as being leading or coinciding in relation to movements in aggregate economic activity. They are seasonally adjusted and presented graphically. The indicators are grouped by cyclical timing.

THE WISCONSIN ECONOMY

SUMMARY FOR AUGUST

A VERY SLIGHT INCREASE IN THE STATE'S EMPLOYMENT LEVEL WAS OVERSHADOWED BY INCREASES IN UNEMPLOYMENT IN AUGUST. LABOR FORCE GROWTH TRANSLATED INTO UNEMPLOYMENT INCREASES.

LEADING ECONOMIC INDICATORS, WHICH SENT MIXED SIGNALS A MONTH AGO, ARE LESS HOPEFUL IN AUGUST. THE AVERAGE WORK WEEK IS DOWN, ALONG WITH OVERTIME HOURS. INITIAL CLAIMS FOR UNEMPLOYMENT COMPENSATION ARE UP; NEW BUSINESS INCORPORATIONS, DOWN.

OTHER KEY INDICATORS WHICH COINCIDE OR LAG GENERAL ECONOMIC ACTIVITY ARE MIXED. THE HELP-WANTED INDEX IS DOWN, BUT JOB OPENINGS RECEIVED AT STATE JOB SERVICE OFFICES ARE UP.

WISCONSIN LABOR FORCE

Employment in Wisconsin improved during August, but only by 500 workers. The seasonally adjusted figures show the increase, though slight, was not merely due to seasonal factors. August's 2,219,800 employment estimate is 8,200 below the year ago employment level.

What little employment gains were made failed to keep pace with increasing unemployment. Jobless workers numbered 256,900 in August, an increase of 3,400 in one month. Seasonally adjusting unemployment figures reveals the August increase to be due to more than seasonal factors...economic conditions simply haven't improved for workers.

The net effect of August's labor force dynamics is a growth in the number of workers and job seekers, but the bulk of the 4,000 labor force increase were jobless. Historically, both the labor force and unemployment decrease from July to August.

Contract construction employment grew in August, both in actual numbers and seasonally adjusted figures. Manufacturing employment, however, decreased slightly. The construction improvement offset manufacturing's loss.

LEADING INDICATORS

The average work week in manufacturing decreased to 39.6 hours during August. The work week had lengthened one month ago, primarily due to an increase in overtime. The overtime hours in August declined, but only slightly. The work week decrease is due to shorter "straight time" hours. Those industries utilizing overtime are reporting more overtime than two months ago.

Average weekly initial claims for unemployment grew to 13,816 during August, a 527 claims increase from a month earlier.

New business incorporations are significantly down in August. This month's incorporations are the lowest number since February of this year. Since then, business incorporations numbered near or above the 500 mark.

OTHER KEY INDICATORS

The Help-Wanted Advertising Index is down to 31 in August from 37 in July (1967=100). The index is a measure of the volume of help-wanted ads placed in newspapers by employers.

The number of job openings received by state Job Service offices increased to 7,618 in August, an over sixty percent growth from one month earlier.

Section

A WISCONSIN ECONOMIC INDICATORS

INDICATOR	UNIT	MONTHLY SERIES Latest Month		Mo/Ago	Yr/Ago	% CHANGE Mo/Ago	Yr/Ago	AVG. 1981
LEADING INDICATORS								
L1 AVG. WORK WEEK, MFG.								
Unadjusted	HOURS	39.6	Aug	40.0	39.9	-1.0	-0.8	40.1
Seasonally Adjusted		39.7		40.4	40.0	-1.7	-0.8	
L2 AVG. OVERTIME HOURS, MFG.								
Unadjusted	HOURS	2.5	Aug	2.6	2.9	-3.8	-13.8	2.7
Seasonally Adjusted		2.3		2.7	2.7	-14.8	-14.8	
L3 AVG. WEEKLY INITIAL CLAIMS								
Unadjusted	NUMBER	13,816	Aug	13,289	9,320	4.0	48.2	11,275
Seasonally Adjusted		19,057		13,396	12,851	42.3	48.3	
L4 BUSINESS FAILURES								
Unadjusted	THOUS.	9,570	Sep	18,259	3,362	-47.6	184.7	-
Seasonally Adjusted	DOL.	11,038		9,175	3,879	20.3	184.6	
L5 BUSINESS FAILURES								
Unadjusted	NUMBER	56	Sep	28	13	100.0	330.8	-
Seasonally Adjusted		104		14	24	642.9	333.3	
L6 NEW BUSINESS INCORPORATIONS								
Unadjusted	NUMBER	446	Aug	528	515	-15.5	-13.4	550
Seasonally Adjusted		460		539	531	-14.7	-13.4	
L7 NET GAIN IN BUSINESS PHONE *ACCESS LINES*								
Unadjusted	NUMBER	815	Aug	-494	1,380	265.0	-40.9	692
Seasonally Adjusted		114		-1,093	679	110.4	-83.2	
L8 BUILDING PLANS EXAMINED								
Unadjusted	NUMBER	209	Aug	214	268	-2.3	-22.0	276
Seasonally Adjusted		198		192	253	3.1	-21.7	
ROUGHLY COINCIDENT INDICATORS								
C1 HELP-WANTED INDEX (MILW.)								
Seasonally Adjusted	INDEX	31	Aug	37	54	-16.2	-42.6	51
C2 UNEMPLOYMENT RATE, TOTAL								
Unadjusted	PERCENT	10.4	Aug	10.3	7.0	-	-	7.8
Seasonally Adjusted		10.7		10.0	7.4	-	-	
C3 NATURAL GAS SALES								
Unadjusted	MIL.	370.5	Dec	288.8	428.1	28.3	-13.5	258.3
Seasonally Adjusted	THERMS	246.2		273.2	284.5	-9.9	-13.5	
C4 NEW CAR REGISTRATIONS								
Unadjusted	NUMBER	13,823	Aug	10,151	13,050	36.2	5.9	13,764
Seasonally Adjusted		12,430		8,728	11,724	42.4	6.0	
C5 ELECTRIC POWER SALES								
Unadjusted	MIL. KWH	1662.6	Dec	1684.6	1729.3	-1.3	-3.9	1712.7
Seasonally Adjusted		1660.9		1705.1	1727.4	-2.6	-3.8	

P = Preliminary

Section

A

WISCONSIN ECONOMIC INDICATORS

INDICATOR	UNIT	MONTHLY SERIES Latest Month		Mo/Ago	Yr/Ago	% CHANGE Mo/Ago	Yr/Ago	AVG. 1981
C6 TOTAL SECURITIES REGISTRATIONS								
Unadjusted	MIL. DOL.	56.0	Aug	98.3	17.0	-43.0	229.4	46.3
Seasonally Adjusted		36.1		108.9	11.0	-66.9	228.2	
C7 PERSONAL INCOME								
Unadjusted	MIL. DOL.	4,255	Jun	4,201	4,085	1.3	4.2	4,060
Seasonally Adjusted		4,255		4,231	4,085	0.6	4.2	
C8 AVG. WEEKLY EARNINGS, MFG.								
Unadjusted	DOLLARS	366.15	Aug	372.57	350.96	-1.7	4.3	352.54
Seasonally Adjusted		373.62		381.34	355.00	-2.0	5.2	
C9 CASH RECEIPTS FROM FARM MKTG.								
Unadjusted	MIL. DOL.	434.5	Jul	401.4	446.6	8.2	-2.7	414.4
Seasonally Adjusted		418.2		408.8	429.7	2.3	-2.7	
C10 CONTRACT CONSTRUCTION EMPL.								
Unadjusted	THOUS.	55.5	Aug	53.2	64.7	4.3	-14.2	60.9
Seasonally Adjusted		49.2		47.2	57.3	4.2	-14.1	
OTHER KEY INDICATORS								
X1 BIRTH REGISTRATIONS								
Unadjusted	NUMBER	7,128	Jul	6,359	6,096	12.1	16.9	6,047
Seasonally Adjusted		6,750		6,246	5,770	8.1	17.0	
X2 DEATH REGISTRATIONS								
Unadjusted	NUMBER	3,579	Jul	3,247	3,238	10.2	10.5	3,351
Seasonally Adjusted		3,767		3,418	3,408	10.2	10.5	
X3 NATURAL NET GAIN POPULATION								
Unadjusted	NUMBER	3,549	Jul	3,112	2,858	14.0	24.2	2,696
Seasonally Adjusted		2,995		2,829	2,412	5.9	24.2	
X4 MARRIAGE REGISTRATIONS								
Unadjusted	NUMBER	5,309	Jul	4,946	4,832	7.3	9.9	3,422
Seasonally Adjusted		3,828		3,498	3,484	9.4	9.9	
X5 CONSUMER PRICE INDEX (MILW.)				(May)				
Unadjusted	INDEX	296.5	Jul	292.9	285.6	1.2	3.8	280.1
X6 PRICES RECEIVED BY FARMERS								
Unadjusted	INDEX	142	Aug	142	144	0.0	-1.4	145
Seasonally Adjusted		145		144	147	0.7	-1.4	
X7 NET GAIN IN RESIDENTIAL PHONE *ACCESS LINES*								
Unadjusted	NUMBER	893	Aug	-1,335	2,226	166.9	-59.9	1,031
Seasonally Adjusted		-408		-227	925	-79.7	-144.1	
X8 TOTAL JOB OPENINGS REC.								
Unadjusted	NUMBER	7,618	Aug	4,706	7,865	61.9	-3.1	7,686
Seasonally Adjusted		5,137		3,978	5,304	29.1	-3.1	
X9 MANUFACTURING EMPL.								
Unadjusted	THOUS.	503.0	Aug	504.1	564.1	-0.2	-10.8	543.8
Seasonally Adjusted		492.2		498.1	551.9	-1.2	-10.8	

P = Preliminary

Section

B

LABOR FORCE ESTIMATES

WISCONSIN LABOR FORCE ESTIMATES AUGUST	(In Thousands)			Pct. Chg.	
	Latest Month	Month Ago	Year Ago	Month Ago	Year Ago
Unadjusted					
CIVILIAN LABOR FORCE	2476.7	2472.7	2395.9	0.2	3.4
Employment (Inc. Labor Disputes)	2219.8	2219.3	2228.0	0.0	-0.4
Unemployment	256.9	253.5	168.0	1.3	52.9
Unemployment Rate	10.4	10.3	7.0	-	-
Seasonally Adjusted					
CIVILIAN LABOR FORCE	2409.9	2389.9	2342.1	0.8	2.9
Employment (Inc. Labor Disputes)	2152.6	2152.0	2169.6	0.0	-0.8
Unemployment	257.3	237.9	172.5	8.2	49.2
Unemployment Rate	10.7	10.0	7.4	-	-

WISCONSIN EMPLOYMENT ESTIMATES AUGUST	(In Thousands)			Pct. Chg.	
	Latest Month	Month Ago	Year Ago	Month Ago	Year Ago
TOTAL NONFARM WAGE AND SALARY WORKERS	1872.4	1868.7	1936.3	0.2	-3.3
Unadjusted					
Manufacturing	502.7	502.2	562.2	0.1	-10.6
Mining	2.1	2.3	2.5	-8.7	-16.0
Contract Construction	55.5	53.2	64.1	4.3	-13.4
Transportation and Public Utilities	84.5	84.8	88.2	-0.4	-4.2
Elec., Gas and Sanitary Services	17.5	17.5	17.1	0.0	2.3
Wholesale Trade	102.3	102.2	100.9	0.1	1.4
Retail Trade	333.3	331.6	338.8	0.5	-1.6
General Merchandise	44.5	44.2	44.4	0.7	0.2
Finance, Insurance and Real Estate	98.5	98.8	97.7	-0.3	0.8
Banking	26.8	27.0	26.9	-0.7	-0.4
Insurance	31.6	31.8	31.7	-0.6	-0.3
Service and Miscellaneous	391.2	388.7	383.6	0.6	2.0
Hospitals	75.0	74.9	75.4	0.1	-0.5
Private Education	22.7	22.5	21.2	0.9	7.1
Government	302.3	304.7	298.5	-0.8	1.3
State Government	73.8	72.4	74.7	1.9	-1.2
Local Government	200.7	204.2	195.9	-1.7	2.5

UNITED STATES LABOR FORCE ESTIMATES AUGUST	(In Thousands)			Pct. Chg.	
	Latest Month	Month Ago	Year Ago	Month Ago	Year Ago
Seasonally Adjusted					
CIVILIAN LABOR FORCE	110,644	110,522	108,818	0.1	1.7
Employment	99,839	99,732	100,840	0.1	-1.0
Unemployment	10,805	10,790	7,978	0.1	35.4
Unemployment Rate	9.8	9.8	7.3	-	-

MANUFACTURING EMPLOYMENT *(Unadjusted)* AUGUST	(In Thousands)		
	Latest Month	Month Ago	Year Ago
All Manufacturing (Including Canning)	502.7	502.2	562.2
All Manufacturing (Excluding Canning)	478.5	482.8	537.2
Durable Goods	300.1	305.2	353.0
Lumber and Wood Prod., (Except Furniture)	19.3	19.1	20.3
Sawmills and Planning Mills	2.5	2.6	2.8
Millwork, Veneer, Plywood & Prefab. Wood Prod.	8.9	8.7	9.8
Furniture and Fixtures	8.6	8.5	9.3
Household Furniture	3.7	3.7	4.0
Stone, Clay and Glass Products	7.6	7.7	8.6
Concrete, Gypsum and Plaster Products	3.5	3.6	4.0
Primary Metal Industries	19.4	19.4	26.1
Iron and Steel Foundries	11.0	11.1	15.4
Fabricated Metal Products	48.3	48.8	57.6
Heating Equipment (Except Electrical) & Plumbing Fixtures	5.3	5.4	5.6
Fabricated Structural Metal Products	11.4	11.6	13.8
Metal Stampings	12.4	12.0	16.4
Machinery (Except Electrical)	100.0	101.6	117.8
Engines and Turbines	20.4	20.2	22.2
Farm Machinery and Equipment	13.9	14.3	15.2
Const., Min. & Material Handling Mach. & Equip.	13.6	13.9	18.6
Metalworking Machinery and Equipment	10.4	10.4	12.8
Special Industry Machinery (Except Metalworking)	10.5	10.7	12.3
General Industrial Machinery and Equipment	13.8	14.2	17.4
Service Industry Machines	7.8	8.1	8.4
Electrical Machinery, Equipment and Supplies	49.1	49.2	55.4
Electrical Industrial Apparatus	18.0	18.3	22.1
Household Appliances	6.5	6.2	6.7
Transportation Equipment	27.3	30.2	34.5
Motor Vehicles and Equipment	21.4	24.2	26.0
Instruments and Related Products	10.7	10.6	12.4
Miscellaneous Manufacturing	9.8	10.0	11.1
Nondurable Goods	202.6	197.0	209.1
Food and Kindred Products	77.9	73.0	78.8
Meat Products	13.4	13.5	13.5
Dairy Products	17.5	17.4	16.9
Canning and Preserving	24.2	19.4	25.0
Bakery Products	4.7	4.7	4.7
Beverage Industries	11.2	11.3	11.6
Textile Mill Products	4.6	4.5	4.3
Knitting Mills	3.8	3.7	3.4
Apparel and Other Finished Products	5.8	5.8	6.6
Paper and Allied Products	47.4	47.5	49.3
Pulp and Paper Mills	30.3	30.2	31.1
Converted Paper and Paperboard Products	8.9	9.0	9.5
Paperboard Containers and Boxes	7.0	6.9	7.4
Printing, Publishing and Allied Industries	31.9	32.0	32.3
Newspapers	10.4	10.7	10.8
Commercial Printing	13.1	12.8	12.9
Chemicals and Allied Products	9.8	9.8	10.3
Rubber and Misc. Plastics Products	16.3	16.1	17.7
Miscellaneous Plastics Products	12.4	12.1	13.4
Leather and Leather Products	8.6	7.9	9.5
Leather Tanning and Finishing	2.4	2.3	2.9
Footwear (Except Rubber)	4.4	4.1	4.7
Other Nondurable Goods	0.4	0.3	0.4

Section

C WISCONSIN EARNINGS AND HOURS DATA

EARNINGS AND HOURS *(Unadjusted)* AUGUST	Average Weekly Earnings			Average Weekly Hours		
	Latest Month	Mo. Ago	Yr. Ago	Latest Month	Mo. Ago	Yr. Ago
All Manufacturing (Incl. Canning)	$366	$373	$348	39.6	40.0	39.9
All Manufacturing (Excl. Canning)	377	379	357	39.6	39.8	40.1
Durable Goods	378	381	359	39.1	39.3	39.7
Lumber/Wood Prod. (Exc. Furn.)	273	275	251	38.8	39.0	38.3
Furniture and Fixtures	278	257	269	40.2	37.1	40.4
Stone, Clay and Glass Products	372	375	338	41.5	41.5	41.3
Primary Metal Industries	357	354	361	38.9	38.5	39.7
Iron and Steel Foundries	357	355	358	38.8	38.8	39.9
Fabricated Metal Products	374	359	354	39.2	37.9	39.5
Fab. Structural Metal Prod.	376	365	352	39.8	39.6	40.5
Metal Stampings	368	330	366	38.8	33.7	38.5
Machinery (Except Electrical)	420	428	401	38.7	40.1	39.8
Engines and Turbines	469	484	414	39.3	43.3	38.1
Farm Machinery and Equip.	420	480	431	37.0	40.7	40.1
Const. and Related Mach.	429	429	410	37.5	37.9	39.3
Metalworking Mach. and Equip.	419	417	398	39.2	38.6	40.4
Spec. Ind. Mach. (Exc. Metal).	428	412	398	41.4	40.5	41.0
Gen. Industrial Mach. and Equip.	427	427	440	38.8	38.8	41.2
Electrical Mach., Equip. and Supp.	353	355	336	38.8	38.9	40.8
Electrical Industrial Apparatus	366	363	367	37.3	37.4	41.3
Transportation Equipment	505	515	433	41.4	42.0	39.1
Instruments and Related Prod.	293	293	285	37.2	38.2	39.4
Nondurable Goods	349	360	330	40.2	41.0	40.2
Food and Kindred Products	318	344	304	39.4	41.2	38.9
Meat Products	392	397	401	38.8	38.7	39.2
Dairy Products	341	341	318	40.1	40.5	40.0
Textile Mill Products	254	255	238	38.9	39.4	37.7
Apparel and Other Fin. Prod.	204	202	196	37.0	36.5	37.1
Paper and Allied Products	436	434	417	44.0	44.2	44.7
Pulp and Paper Mills	466	467	449	45.0	45.5	46.1
Printing, Pub. and Allied Prod.	411	402	378	38.9	38.5	39.4
Chemicals and Allied Products	391	391	375	39.5	39.6	40.1
Rubber and Misc. Plastics Prod.	295	304	272	39.0	39.2	38.5
Leather and Leather Products.	243	238	229	38.0	38.4	38.7

Section

C WISCONSIN EARNINGS AND HOURS DATA

EARNINGS AND HOURS *(Unadjusted)* AUGUST	Average Hourly Earnings Including O.T.			Average Hourly Earnings Excluding O.T.		
	Latest Month	Mo. Ago	Yr. Ago	Latest Month	Mo. Ago	Yr. Ago
All Manufacturing (Incl. Canning)	$9.25	$9.31	$8.73	$9.02	$9.08	$8.45
All Manufacturing (Excl. Canning)	9.51	9.52	8.92	9.25	9.27	8.62
Durable Goods	9.67	9.69	9.04	9.48	9.50	8.80
Lumber/Wood Prod. (Exc. Furn.)	7.02	7.05	6.56	6.90	6.89	6.40
Furniture and Fixtures	6.92	6.93	6.65	-	-	6.60
Stone, Clay and Glass Products	8.97	9.04	8.17	8.81	8.87	7.96
Primary Metal Industries	9.20	9.19	9.08	9.00	8.92	8.77
Iron and Steel Foundries	9.20	9.16	8.97	8.98	8.82	8.66
Fabricated Metal Products	9.55	9.49	8.98	9.26	9.23	8.63
Fab. Structural Metal Prod.	9.46	9.23	8.69	9.28	9.08	8.41
Metal Stampings	9.50	9.79	9.51	9.43	9.70	9.24
Machinery (Except Electrical)	10.85	10.68	10.07	10.73	10.60	9.83
Engines and Turbines	11.92	11.18	10.88	11.82	11.14	10.72
Farm Machinery and Equip.	11.36	11.79	10.74	11.19	11.74	10.58
Const. and Related Mach.	11.43	11.32	10.43	11.30	11.25	10.24
Metalworking Mach. and Equip.	10.69	10.82	9.85	-	10.70	9.46
Spec. Ind. Mach. (Exc. Metal).	10.33	10.19	9.72	10.06	9.95	9.37
Gen. Industrial Mach. and Equip.	11.01	11.00	10.69	10.85	10.91	10.28
Electrical Mach., Equip. and Supp.	9.11	9.13	8.24	9.06	9.01	8.00
Electrical Industrial Apparatus	9.81	9.70	8.89	9.73	9.61	8.57
Transportation Equipment	12.19	12.27	11.07	11.62	11.72	10.85
Instruments and Related Prod.	7.88	7.68	7.23	7.84	7.59	7.11
Nondurable Goods	8.68	8.77	8.21	8.35	8.43	7.83
	8.07	8.34	7.81	7.77	7.97	7.44
Food and Kindred Products	10.11	10.27	10.23	9.81	9.91	9.84
Meat Products	8.51	8.41	7.94	8.19	8.11	7.65
Dairy Products	6.52	6.49	6.30	6.29	6.21	6.04
Textile Mill Products	5.52	5.54	5.28	5.47	5.52	5.18
Apparel and Other Fin. Prod.	9.91	9.82	9.34	9.43	9.38	8.82
Paper and Allied Products	10.36	10.26	9.75	9.80	9.74	9.17
Pulp and Paper Mills	10.57	10.44	9.59	-	-	-
Printing, Pub. and Allied Prod.	9.89	9.86	9.34	9.77	9.75	9.17
Chemicals and Allied Products	7.57	7.76	7.07	7.40	7.67	6.88
Rubber and Misc. Plastics Prod.	6.40	6.20	5.93	6.34	6.11	5.80
Leather and Leather Products.						

Section

C SUMMARY OF RECENT WISCONSIN DATA

EARNINGS AND HOURS, MFG. Production Workers (Unadjusted) AUGUST	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings Including O.T.			Average Hourly Earnings Excluding O.T.	
	Latest Month	Month Ago	Year Ago	Latest Month	Month Ago	Year Ago	Latest Month	Month Ago	Year Ago	Latest Month	Month Ago
United States	$332	$333	$320	39.0	39.0	39.9	8.51	8.55	8.03	-	-
Wisconsin	366	373	348	39.6	40.0	39.9	9.25	9.31	8.73	9.02	9.08
Selected Areas											
Appleton-Oshkosh (Calumet-Winnebago-Outagamie)	362	365	351	40.7	41.1	41.6	8.91	8.88	8.45	8.63	8.58
Beloit (City)	392	368	335	42.5	40.9	40.7	9.24	9.02	8.25	8.89	8.76
Eau Claire (Eau Claire-Chippewa)	357	354	349	39.9	40.3	41.0	8.95	8.78	8.49	8.68	8.45
Fond du Lac (County)	333	341	296	41.0	42.4	37.4	8.11	8.03	7.92	7.88	7.53
Green Bay (Brown County)	398	409	370	42.5	42.6	42.5	9.36	9.61	8.71	8.85	9.12
Janesville (City)	396	458	406	36.0	38.8	37.2	10.99	11.80	10.94	10.56	11.52
Janesville-Beloit (Rock County)	352	388	359	38.9	39.0	38.9	9.06	9.96	9.23	8.67	9.69
Kenosha (County)	492	499	385	41.8	42.3	39.3	11.79	11.81	9.81	11.04	10.99
La Crosse (County)	331	329	314	38.2	37.6	40.4	8.68	8.75	7.77	8.43	8.66
Madison (Dane County)	360	373	339	39.8	40.5	40.0	9.06	9.22	8.47	8.63	8.75
Manitowoc (County)	288	268	281	37.5	34.4	38.7	7.68	7.79	7.25	7.58	7.73
Milwaukee (Milwaukee-Ozaukee-Waukesha-Washington)	415	415	390	39.5	39.7	39.8	10.51	10.45	9.80	10.24	10.18
Racine (County)	362	402	378	37.6	39.6	40.0	9.65	10.17	9.44	9.45	10.05
Sheboygan (County)	350	354	283	39.5	39.9	34.8	8.86	8.87	8.14	8.72	8.75
Wausau (Marathon County)	363	361	362	39.4	39.7	41.5	9.21	9.09	8.71	8.69	8.66

EMPLOYMENT, MFG. (Unadjusted) AUGUST	(In Thousands)			Percent Change	
	Latest Month	Month Ago	Year Ago	Month Ago	Year Ago
United States	18,793.0	18,725.0	20,370.0	0.4	-7.7
Wisconsin	502.7	502.2	562.2	0.1	-10.6
Selected Areas					
Appleton-Oshkosh (Calumet-Winnebago-Outagamie)	44.1	43.8	47.9	0.7	-7.9
Beloit (City)	6.5	6.7	7.5	-3.0	-13.3
Eau Claire (Eau Claire-Chippewa)	8.7	9.0	9.1	-3.3	-4.4
Fond du Lac (County)	10.7	10.7	12.0	0.0	-10.8
Green Bay (Brown County)	22.4	21.8	23.4	2.8	-4.3
Janesville (City)	5.7	9.0	9.9	-36.7	-42.4
Janesville-Beloit (Rock County)	14.5	17.8	19.6	-18.5	-26.0
Kenosha (County)	16.6	16.1	16.8	3.1	-1.2
La Crosse (County)	10.1	10.9	10.5	1.0	-3.8
Madison (Dane County)	19.7	19.7	21.0	0.0	-6.2
Manitowoc (County)	11.5	11.0	15.5	4.5	-25.8
Milwaukee (Milwaukee-Ozaukee-Waukesha-Washington)	170.0	169.0	197.0	0.6	-13.7
Racine (County)	22.5	23.4	27.0	-3.8	-16.7
Sheboygan (County)	18.4	17.9	18.8	2.8	-2.1
Wausau (Marathon County)	10.9	11.0	12.2	-0.9	-10.7

OCCUPATIONAL PROJECTIONS 1990, HOW TO

by Gerald Snow and Joseph Tumpach, Jr.

Though nobody knows the future, people enthusiastically greet those "most likely scenarios, given no abrupt change in basic assumptions." Planning for the future, even on less than perfect forecasting, is better than no planning at all. Wisconsin's Department of Industry, Labor and Human Relations, accordingly, projects employment growth and occupational needs of employers.

A short explanation of the sources and tools used is a helpful preliminary when discussing occupational projections. Such a menu appeared in "Approaches to Projecting the Economy" in the Wisconsin Employment and Economic Indicators, December, 1981, issue.

Projections of labor needs for various Wisconsin industries were produced. Employment demand was estimated for 1985 and 1990 by the department's Labor Market Information Unit. These industry-need projections are the first of a three step process which ultimately will project occupational needs. It is a necessary process. Once industry leaders and planners know their labor needs, it is up to the officials of educational and training institutions to provide that supply of labor. The projections to 1990 state that Wisconsin business and industry will face a severe labor shortage in most skill areas in the last decade of the 20th century unless young people are trained today to meet the job needs of the 1990's. In commenting on that statement, Mr. Robert Sorensen, State Director of the Wisconsin Board of Vocational, Technical and Adult Education (VTAE), reporting to the Legislature's Special Committee on Economic Development said, "... I would like to emphasize these two words 'trained today' in that DILHR study statement."

The "industry projections," then, do point to possible labor shortages in various industries. The projections are a stark contrast to record-level, double-digit unemployment rates of this year. The likely dramatic labor supply change caused by the decreasing birth rate of the 1960's was pointed out to administrators and bureau directors in committee meetings before the Department of Public Instruction (DPI) and VTAE.

Industry labor needs must be met. That means training workers now, teaching required skills and occupations now, and, thus, setting up class curricula now. The industrial projections, thus, must be converted to occupational requirements for vocational educators to determine course needs.

Explaining the Occupational Projections Program procedures should remove any misgivings about the process and might provide a benchmark to compare future projection techniques. Detailed occupational openings within a given geographical area for a target year is the aim of the projection system. Forecasts must be accurate and reliable as possible.

The just-published industry projections utilized the opinions of 18 economists, analysts, demographers, and business people. State labor market analysts first determined the number of people expected to be in the labor force in 1990. Determining the number of those working or seeking work is done by projecting "participation rates" for various age groups,

both men's and women's. The labor force participation rates applied to the various age-group numbers result in a labor force magnitude. Next, employment within various industries was projected, and, as always, the projections depend on past trends. Data from 1954 through 1980 was used and the mathematical mechanics were supplied to the projection panel. The names of the projection techniques sound like mathematical exotica from high-level college texts ... least square straight line, hyperbolic function, log function, the BLS National projection rate, implicit shift-share and classical shift-share. Each of the 18 member panel experts supplied the "human input" and the results were tabulated on computer. The projection of employment in various industries consists of the highest, the lowest, and the average estimate of the panel members for 1985 and 1990.

The jump from industrial employment projections to occupational projections requires a matrix, a grid with industries listed along the top and occupations along the side. Any column of numbers in the matrix represents the total employment in that particular industry divided into the occupations occurring in that industry. Employment for 250 different industries was built into the matrix: the data was derived from the Employment and Wage Report (ES-202) required quarterly from Wisconsin employers. The 1200 occupations represented on the matrix were collected with the Occupational Employment Statistics (OES) program. That program, during the last three years, surveyed employment in various occupations in manufacturing, nonmanufacturing and trade industries throughout the state. The 1200 occupations plotted across 250 industries produces a huge number of occupational data cells - 300,000. The result is a pattern of occupations within various industries - a staffing pattern. Such large quantities of data require a computer; and computer program debugging. When the computer program is operating, the 300,000 cell staffing pattern will be applied to the industry projections for 1990, yielding occupational projections.

Human judgement must be interjected into the purely mechanical process at this point. Impossible result can otherwise result. Past efforts using strictly mathematical equations resulted in such illogical answers as, for example, undertakers projected to outnumber the deceased. Examination of the mechanical projections will require the help of the 18 member panel of educators, economists, demographers and analysts. Even with that size of a panel, 300,000 cells of data is overwhelming. The occupations common to several industries are added, making the number of occupations more manageable. With the need for human adjustment of the sometimes faulty results of a mechanical process, are the projections reliable? Professor William Strang in his publication "Wisconsin's Economy in 1990" asks and answers:

"Are forecasts futile?"

"I believe not. The very process of making a forecast is valuable. Certainly the forecaster, forced to review economic history in depth in an attempt to understand what has happened, gains by learning. To the extent that the forecaster explains the underlying basis for his or her forecasts and the underlying relationships among key economic variables, the reader is given the opportunity to learn more about the relevant ... a base point from which to measure economic progress ... forces a perspective beyond the problems of the moment ... the long range view at

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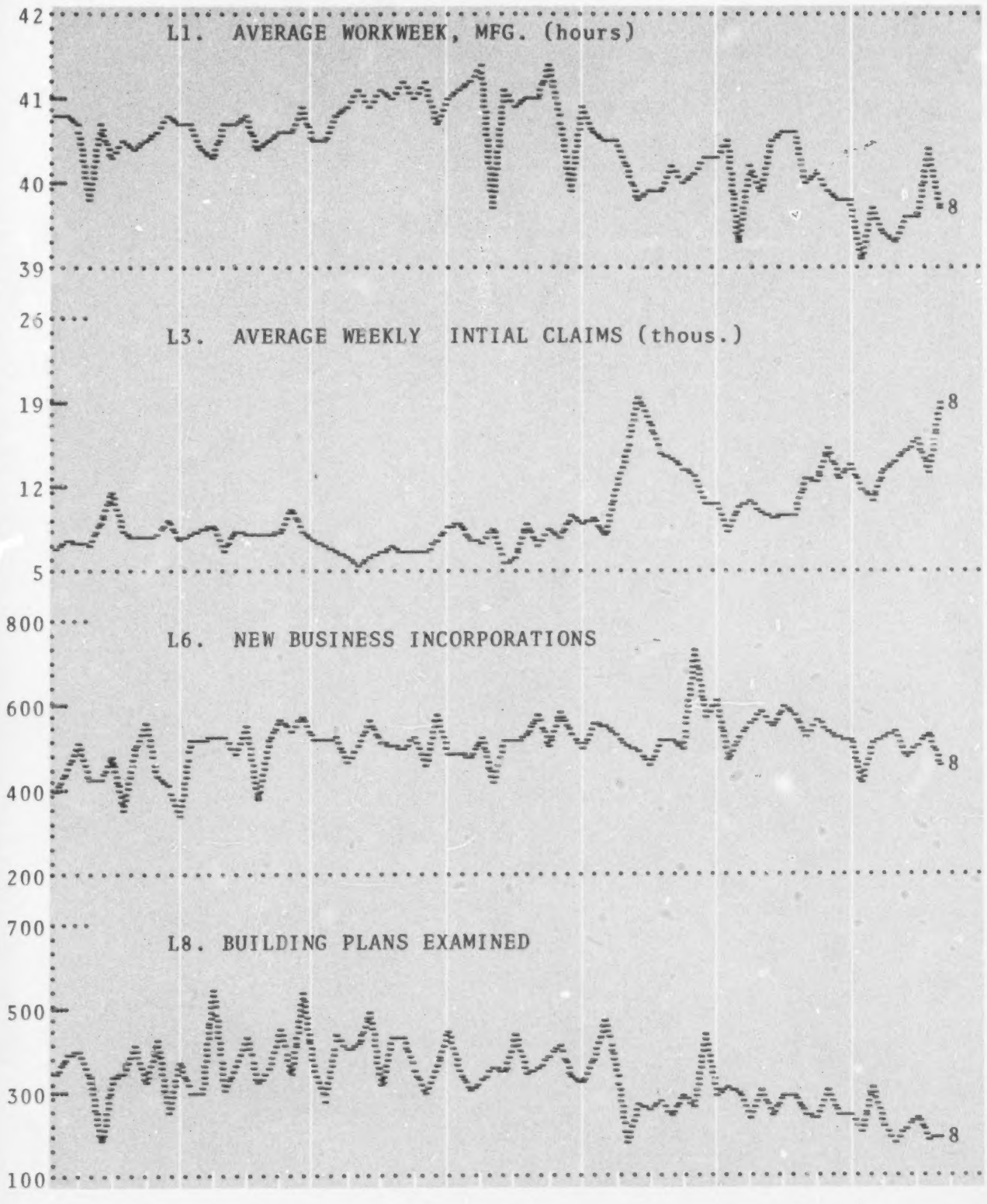
CYCLICAL INDICATORS



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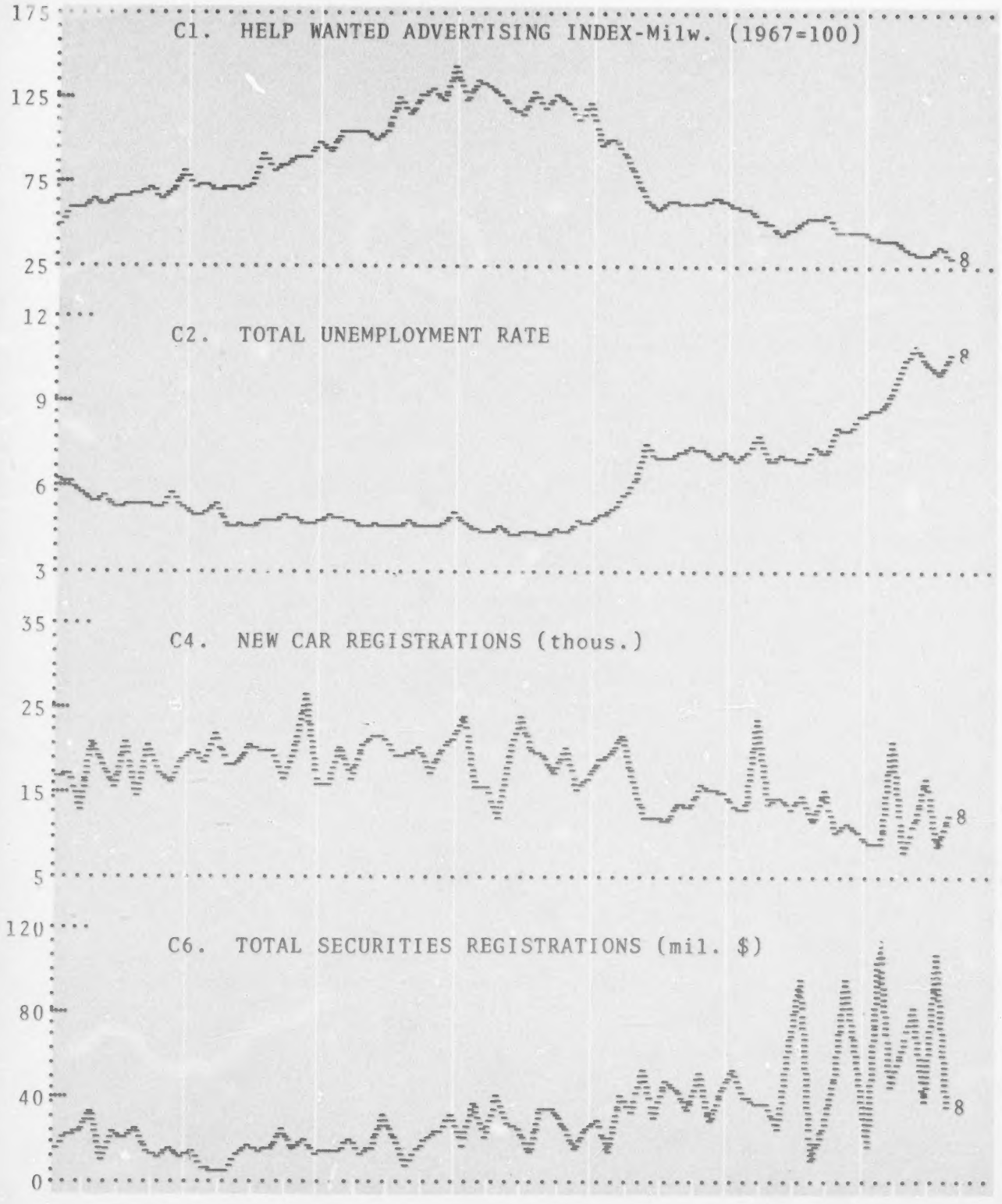

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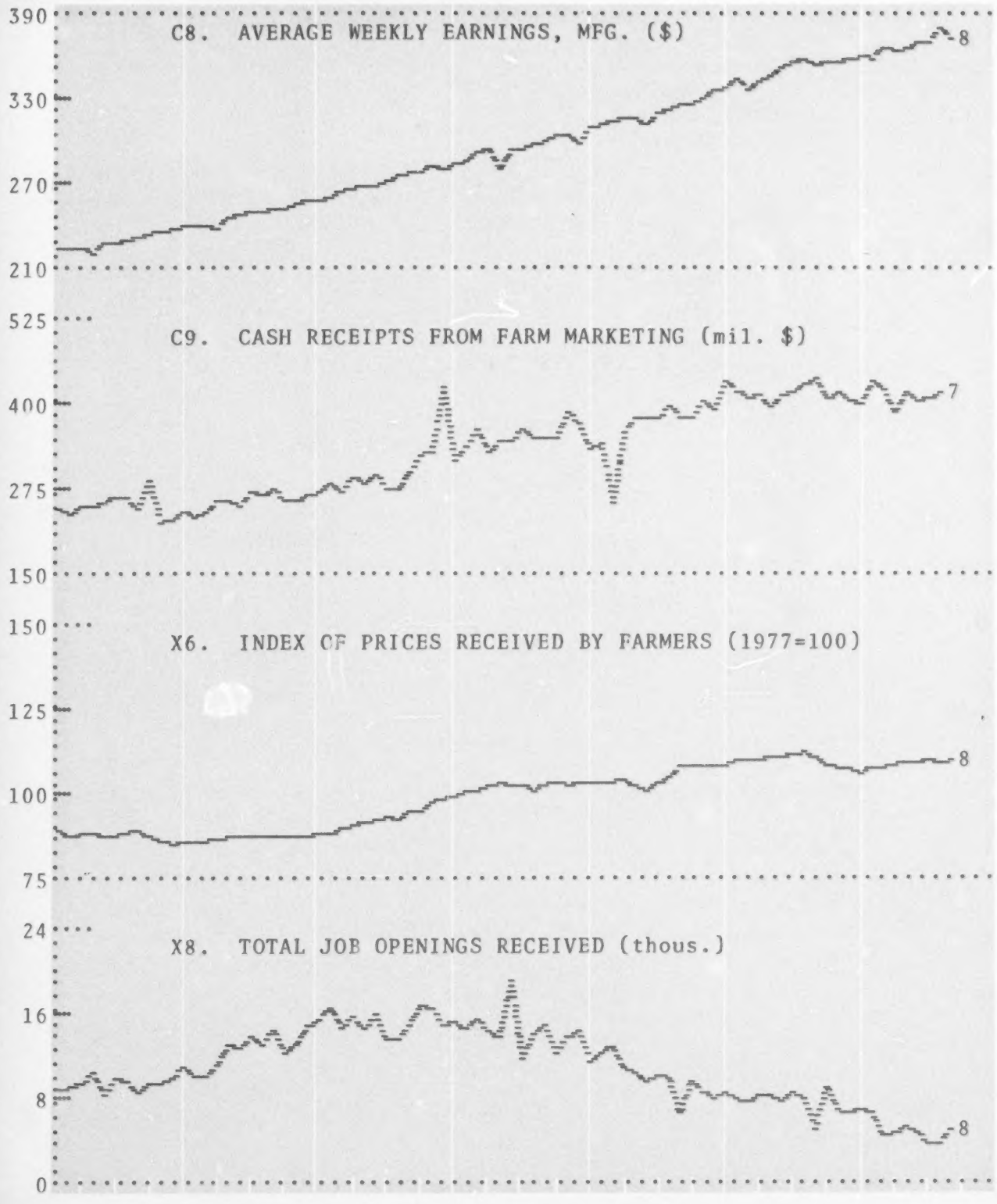

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least forces us to ask why our economic viewpoint is different now than in the past and to recognize that our short term problems may not be indicative of our long-run outlook."